

# INTERNATIONAL SEARCH REPORT

International application No  
PCT/IB2005/003127

A. CLASSIFICATION OF SUBJECT MATTER  
INV. H02M7/48

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)  
H02M H02J H02P B60L

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
E	EP 1 615 325 A (NISSAN MOTOR CO., LTD) 11 January 2006 (2006-01-11) the whole document	1-18
E	WO 2005/119897 A (TOYOTA JIDOSHA KABUSHIKI KAISHA; MITSUBISHI DENKI KABUSHIKI KAISHA; OY) 15 December 2005 (2005-12-15) the whole document	1, 13
X	US 4 443 841 A (MIKAMI ET AL) 17 April 1984 (1984-04-17) the whole document	1-18
A	US 6 031 738 A (LIPO ET AL) 29 February 2000 (2000-02-29)  figures 1,2,10	2,3,5-7, 9-11, 14-16

☐ Further documents are listed in the continuation of Box C.

☒ See patent family annex.

### \* Special categories of cited documents:

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- \*O\* document referring to an oral disclosure, use, exhibition or other means
- \*P\* document published prior to the International filing date but later than the priority date claimed

- \*T\* later document published after the International filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- \*X\* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- \*Y\* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- \*G\* document member of the same patent family

Date of the actual completion of the International search

13 June 2006

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26/06/2006

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# INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No  
PCT/IB2005/003127

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
EP 1615325	A	11-01-2006	US 2006006832 A1	12-01-2006
WO 2005119897	A	15-12-2005	JP 2005348544 A	15-12-2005
US 4443841	A	17-04-1984	DE 3105094 A1	14-01-1982
			JP 1491377 C	07-04-1989
			JP 56115182 A	10-09-1981
			JP 63038952 B	02-08-1988
US 6031738	A	29-02-2000	NONE	